

COX I 5'-END NON-CODING REGION, CODING REGION:5964-7505 (1542bp), AND  
3'-END NON-CODING REGION  
(SEQ. ID. NO. 1)

5'-AGAGGCCTAA CCCCTGTCTTTAGATTTTAC AGTCCAATGCTTCACTCAGC  
CATTTTACCT CACCCCCACT G

ATG TTC GCC GAC CGT TGA CTA TTC TCT ACA AAC CAC AAA GAC ATT GGA ACA  
CTA TAC CTA TTA TTC GGC GCA TGA GCT GGA GTC CTA GGC ACA GCT CTA AGC  
CTC CTT ATT CGA GCC GAG CTG GGC CAG CCA GGC AAC CTT CTA GGT AAC GAC  
CAC ATC TAC AAC GTT ATC GTC ACA GCC CAT GCA TTT GTA ATA ATC TTC TTC  
ATA GTA ATA CCC ATC ATA ATC GGA GGC TTT GGC AAC TGA CTA GTT CCC CTA  
ATA ATC GGT GCC CCC GAT ATG GCG TTT CCC CGC ATA AAC AAC ATA AGC TTC  
TGA CTC TTA CCT CCC TCT CTC CTA CTC CTG CTC GCA TCT GCT ATA GTG GAG  
GCC GGA GCA GGA ACA GGT TGA ACA GTC TAC CCT CCC TTA GCA GGG AAC TAC  
TCC CAC CCT GGA GCC TCC GTA GAC CTA ACC ATC TTC TCC TTA CAC CTA GCA  
GGT GTC TCC TCT ATC TTA GGG GCC ATC AAT TTC ATC ACA ACA ATT ATC AAT  
ATA AAA CCC CCT GCC ATA ACC CAA TAC CAA ACG CCC CTC TTC GTC TGA TCC

*Fig. 1A*

GTC CTA ATC ACA GCA GTC CTA CTT CTC CTA TCT CTC CCA GTC CTA GCT GCT  
GGC ATC ACT ATA CTA CTA ACA GAC CGC AAC CTC AAC ACC ACC TTC TTC GAC  
CCC GCC GGA GGA GGA GAC CCC ATT CTA TAC CAA CAC CTA TTC TGA TTT TTC  
GGT CAC CCT GAA GTT TAT ATT CTT ATC CTA CCA GGC TTC GGA ATA ATC TCC  
CAT ATT GTA ACT TAC TAC TCC GGA AAA AAA GAA CCA TTT GGA TAC ATA GGT  
ATG GTC TGA GCT ATG ATA TCA ATT GGA TTC CTA GGG TTT ATC GTG TGA GCA  
CAC CAT ATA TTT ACA GTA GGA ATA GAC GTA GAC ACA CGA GCA TAT TTC ACC  
TCC GCT ACC ATA ATC ATC GCT ATC CCC ACC GGC GTC AAA GTA TTT AGC TGA  
CTC GCC ACA CTC CAC GGA AGC AAT ATG AAA TGA TCT GCT GCA GTG CTC TGA  
GCC CTA GGA TTC ATC CTT TTC ACC GTA GGT GGC CTG ACT GGC ATT GTA TTA  
GCA AAC TCA TCA CTA GAC ATC GTA CTA CAC GAC ACG TAC TAC GTT GTA GCC  
CAC TTC CAC TAT GTC CTA TCA ATA GGA GCT GTA TTT GCC ATC ATA GGA GGC  
TTC ATT CAC TGA TTT CCC CTA TTC TCA GGC TAC ACC CTA GAC CAA ACC TAC  
GCC AAA ATC CAT TTC ACT ATC ATA TTC ATC GGC GTA AAT CTA ACT TTC TTC  
CCA CAA CAC TTT CTC GGC CTA TCC GGA ATG CCC CGA CGT TAC TCG GAC TAC  
CCC GAT GCA TAC ACC ACA TGA AAC ATC CTA TCA TCT GTA GGC TCA TTC ATT  
TCT CTA ACA GCA GTA ATA TTA ATA ATT TTC ATG ATT TGA GAA GCC TTC GCT  
TCG AAG CGA AAA GTC CTA ATA GTA GAA GAA CCC TCC ATA AAC CTG GAG TGA  
CTA TAT GGA TGC CCC CCA CCC TAC CAC ACA TTC GAA GAA CCC GTA TAC ATA  
AAA TCT AGA

CAAAAAAGGA AGGAATCGAA CCCCCCAAAG CTGGTTTCAA GCCAACCCCA TGGCCTCCAT  
GACTTTTTCA AAAAGGTATT AGAAAAACCA TTTCATAACT TTGTCAAAGT TAAATTATAG  
GCTAA-3'

*Fig. 1B*

COX II 5'-END NON-CODING REGION, CODING REGION: 7646-8329 (684bp), AND  
3'-END NON-CODING REGION  
(SEQ. ID. NO. 2)

AGGTATTAGA AAAACCATTT CATACTTTG TCGTCAAAGT TAAATTATAG  
GCTAAATCCT ATATATCTTA

ATG GCA CAT GCA GCG CAA GTA GGT CTA CAA GAC GCT ACT TCC CCT ATC ATA  
GAA GAG CTT ATC ACC TTT CAT GAT CAC GCC CTC ATA ATC ATT TTC CTT ATC  
TGC TTC CTA GTC CTG TAT GCC CTT TTC CTA ACA CTC ACA ACA AAA CTA ACT  
AAT ACT AAC ATC TCA GAC GCT CAG GAA ATA GAA ACC GTC TGA ACT ATC CTG  
CCC GCC ATC ATC CTA GTC CTC ATC GCC CTC CCA TCC CTA CGC ATC CTT TAC  
ATA ACA GAC GAG GTC AAC GAT CCC TCC CTT ACC ATC AAA TCA ATT GGC CAC  
CAA TGG TAC TGA ACC TAC GAG TAC ACC GAC TAC GGC GGA CTA ATC TTC AAC  
TCC TAC ATA CTT CCC CCA TTA TTC CTA GAA CCA GGC GAC CTG CGA CTC CTT  
GAC GTT GAC AAT CGA GTA GTA CTC CCG ATT GAA GCC CCC ATT CGT ATA ATA  
ATT ACA TCA CAA GAC GTC TTG CAC TCA TGA GCT GTC CCC ACA TTA GGC TTA  
AAA ACA GAT GCA ATT CCC GGA CGT CTA AAC CAA ACC ACT TTC ACC GCT ACA  
CGA CCG GGG GTA TAC TAC GGT CAA TGC TCT GAA ATC TGT GGA GCA AAC CAC  
AGT TTC ATG CCC ATC GTC CTA GAA TTA ATT CCC CTA AAA ATC TTT GAA ATA  
GGG CCC GTA TTT ACC CTA TAG

CACCCCCTCT ACCCCCTCTA GAGCCCACTG TAAAGCTAAC TTAGCATTAA C  
CTTTTAAGT TAAAGATTAA GAGAACCAAC ACCTGTTTAC AGTGAAATGC

*Fig. 2*

COS III 5'-END NON-CODING REGION, CODING REGION: 9267-10052 (785  
bp), AND 3'-END NON-CODING REGION  
(SEQ. ID. NO. 3)

TCGCTGTCGC CTTAATCCAA GCCTACGTTT TCACACTTCT AGTAAGCCTC  
TACCTGCACG ACAACACATA

ATG ACC CAC CAA TCA CAT GCC TAT CAT ATA GTA AAA CCC AGC CCA TGA CCC  
CTA ACA GGG GCC CTC TCA GCC CTC CTA ATG ACC TCC GGC CTA GCC ATG TGA  
TTT CAC TTC CAC TCC ATA ACG CTC CTC ATA CTA GGC CTA CTA ACC AAC ACA  
CTA ACC ATA TAC CAA TGA TGG CGC GAT GTA ACA CGA GAA AGC ACA TAC CAA  
GGC CAC CAC ACA CCA CCT GTC CAA AAA GGC CTT CGA TAC GGG ATA ATC CTA  
TTT ATT ACC TCA GAA GTT TTT TTC TTC GCA GGA TTT TTC TGA GCC TTT TAC  
CAC TCC AGC CTA GCC CCT ACC CCC CAA TTA GGA GGG CAC TGG CCC CGA ACA  
GGC ATC ACC CCG CTA AAT CCC CTA GAA GTC CCA CTC CTA AAC ACA TCC GTA  
TTA CTC GCA TCA GGA GTA TCA ATC ACC TGA GCT CAC CAT AGT CTA ATA GAA  
AAC AAC CGA AAC CAA ATA ATT CAA GCA CTG CTT ATT ACA ATT TTA CTG GGT  
CTC TAT TTT ACC CTC CTA CAA GCC TCA GAG TAC TTC GAG TCT CCC TTC ACC  
ATT TCC GAC GGC ATC TAC GGC TCA ACA TTT TTT GTA GCC ACA GGC TTC CAC  
GGA CTT CAC GTC ATT ATT GGC TCA ACT TTC CTC ACT ATC TGC TTC ATC CGC  
CAA CTA ATA TTT CAC TTT ACA TCC AAA CAT CAC TTT GGC TTC GAA GCC GCC  
GCC TGA TAC TGG CAT TTT GTA GAT GTG GTT TGA CTA TTT CTG TAT GTC TCC  
ATC TAT TGA TGA GGG TCT TAC

TCTTTTAGTA TAAATAGTAC CGTTAACTTC CAATT  
AACTA GTTTTGACAA CATTCAAAAA AGAGTAATAA ACTTCGCCTT AATTTTAATA  
ATCAACACCC

*Fig. 3*

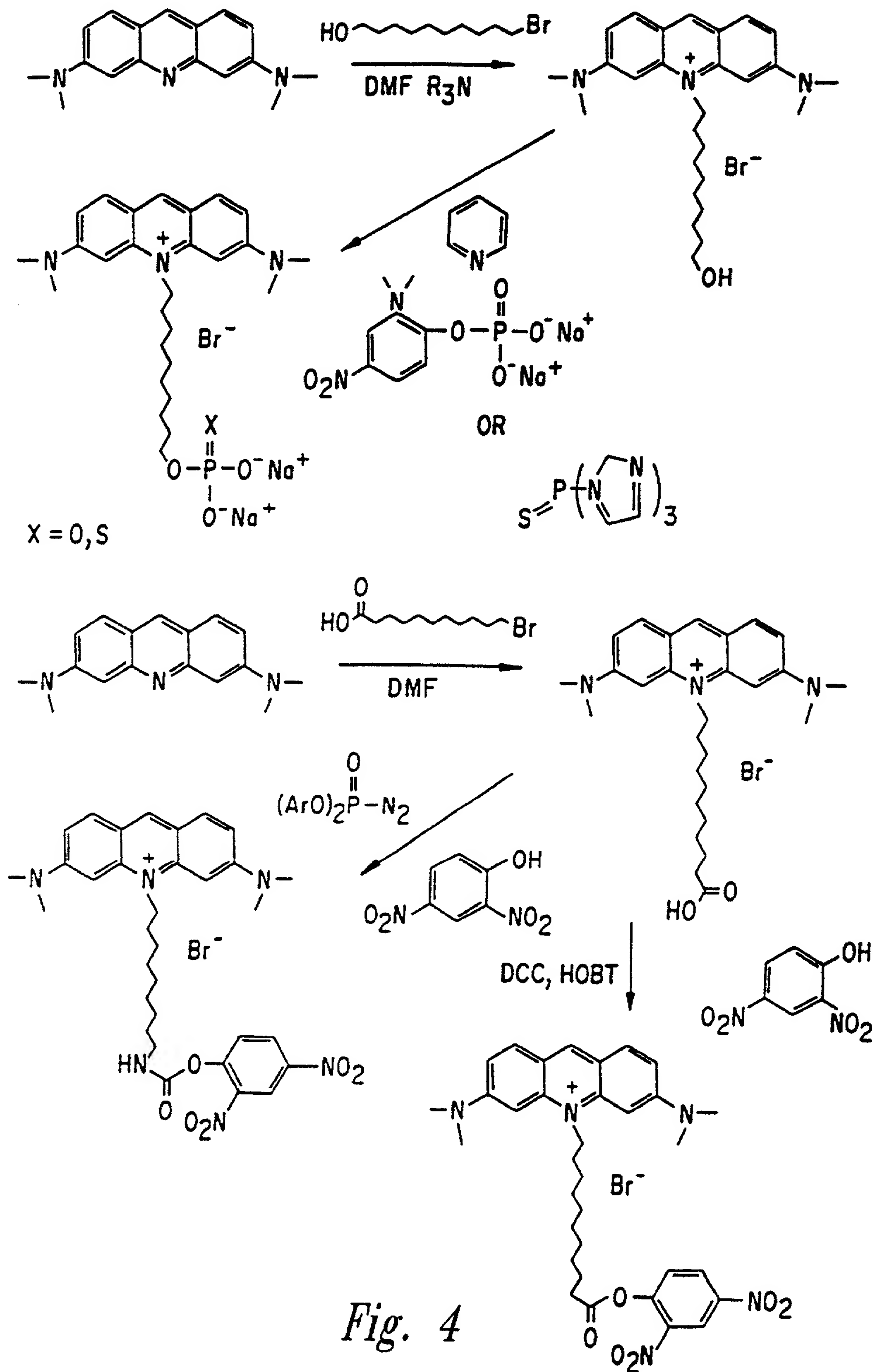


Fig. 4

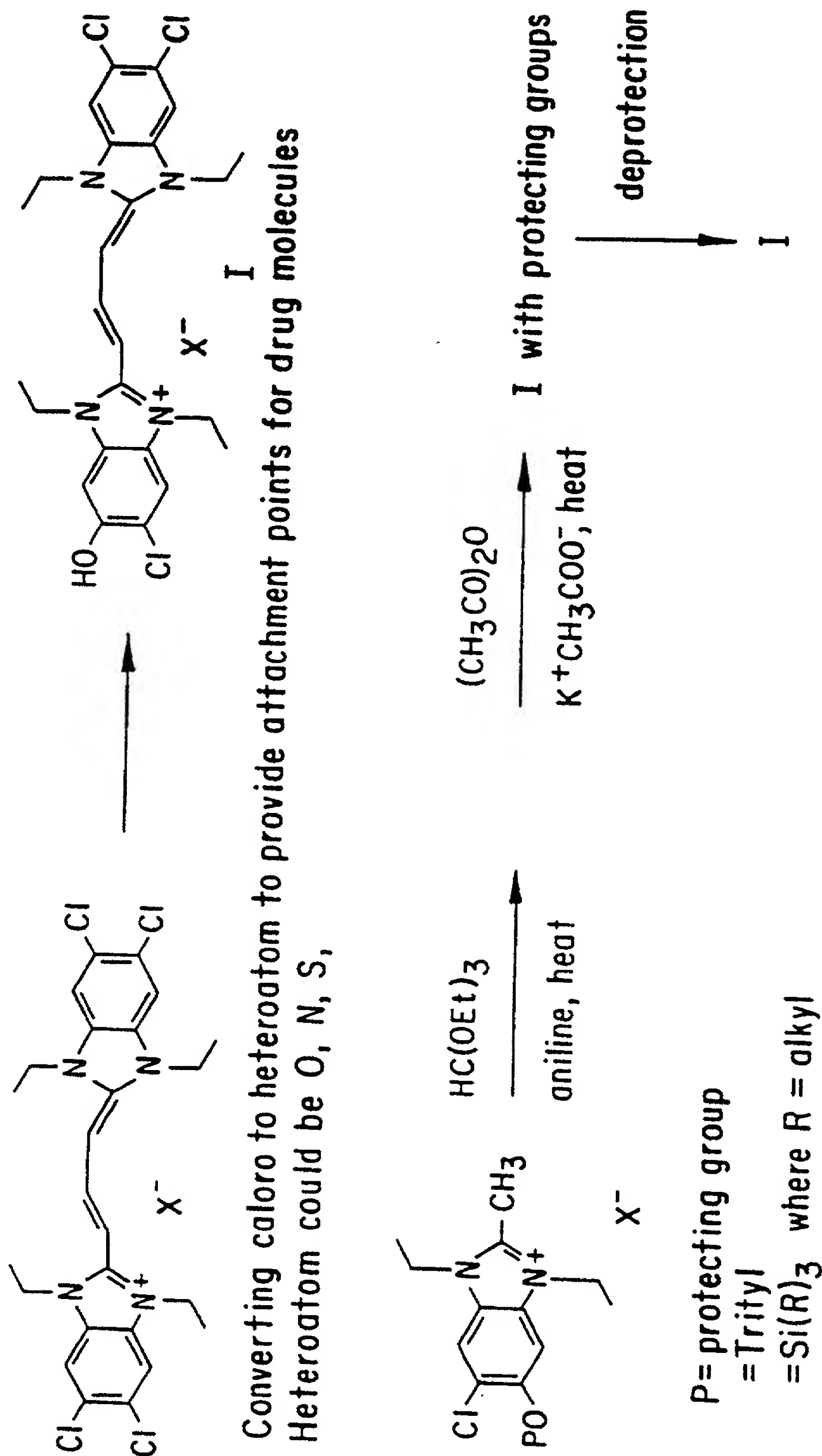
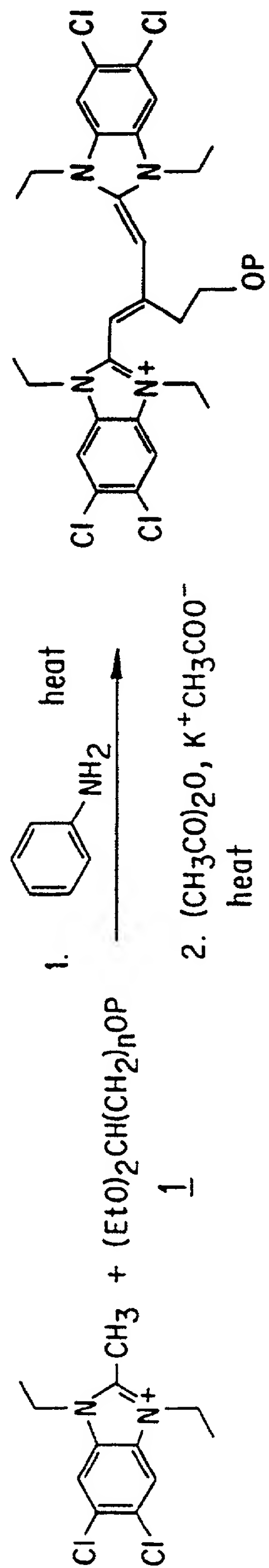


Fig. 5



The spacer in 1 could be varied in length such that  $n = 1$  to 10

Fig. 6

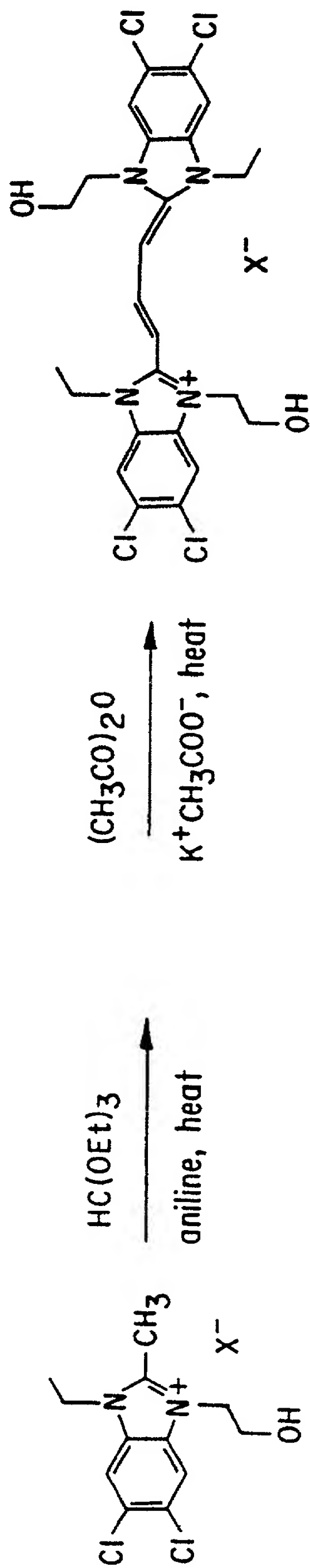
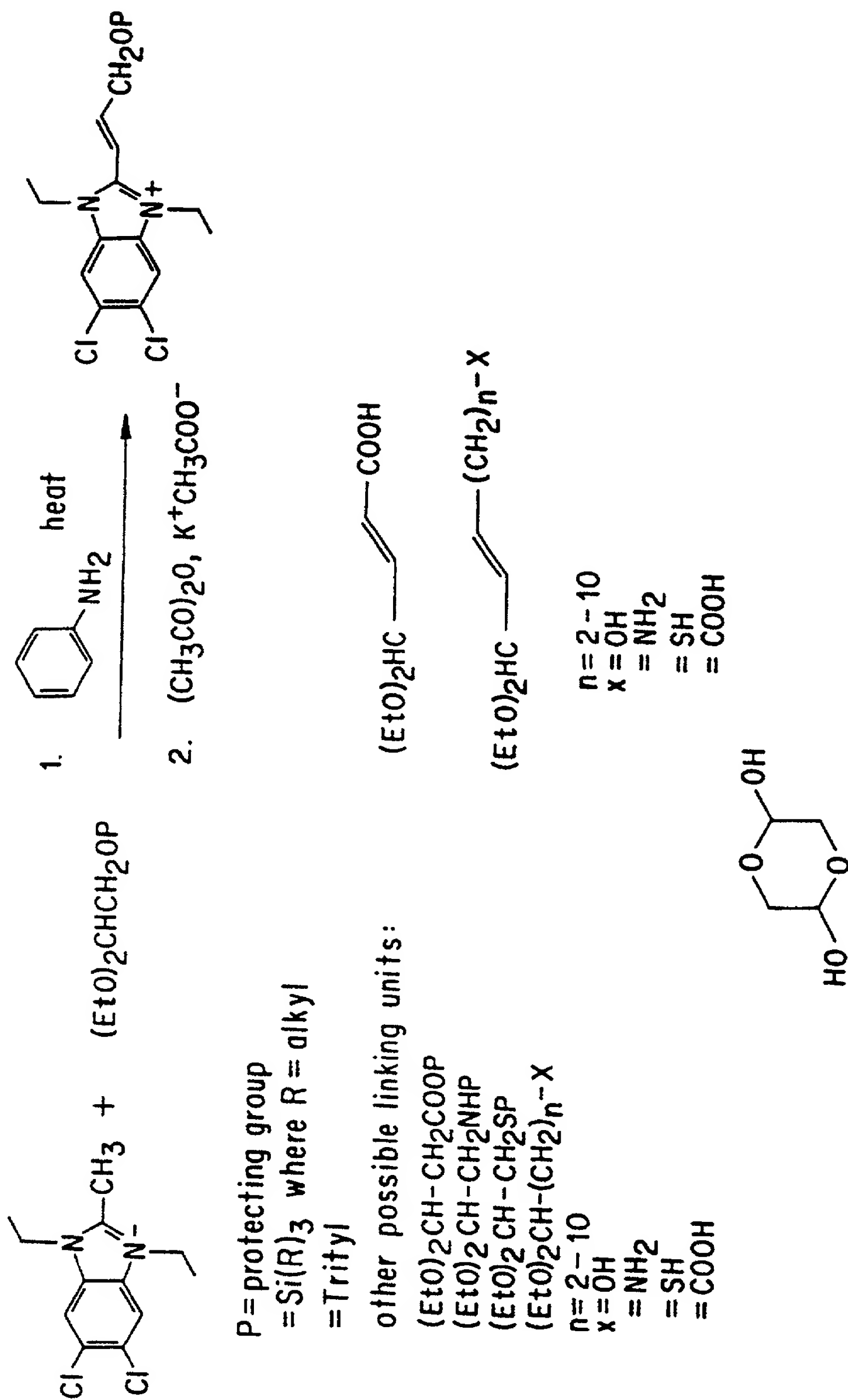


Fig. 7





For each acetal represented, this could also be a ketal where H is replaced by an alkyl group C1 to C10

Fig. 8